

**ABSTRACT OF THE DISCLOSURE**

Nucleic acid, including DNA, for immunization to generate a protective immune response in a host, including humans, to a major outer membrane protein of a strain of *Chlamydia*, preferably contains a nucleotide sequence encoding a MOMP or a MOMP fragment that generates antibodies that specifically react with MOMP and a promoter sequence operatively coupled to the first nucleotide sequence for expression of the MOMP in the host. The non-replicating vector may be formulated with a pharmaceutically-acceptable carrier for *in vivo* administration to the host.